CLAIMS

What is claimed is:

1. (Canceled) Epicyclic gear train, comprising:

a rotating carrier;

a satellite gear rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gear;

said carrier is coaxial to said first and second gears;

said satellite gear is an enveloping worm and first and second gears are matting gears with said enveloping worm.

2. (Canceled) Epicyclic gear train as recited in claim 1 wherein said enveloping worm has threads with less than one revolution.
3. (Canceled) Epicyclic gear train as recited in claim 1 wherein said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worm.
4. (Canceled) Epicyclic gear train as recited in claim 1 wherein said first and second gears have axis of rotation parallel to axis of rotation of said enveloping worm.
5. (Canceled) Epicyclic gear train as recited in claim 1 wherein said first and second gears have axis of rotation crossing axis of rotation of said enveloping worm.

6. (Canceled) Epicyclic gear train, comprising:

a rotating carrier;

first and second coaxial satellite gears rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gear;

said carrier is coaxial to said first and second gears;

said first satellite gear is an enveloping worm;

said second satellite gear is an enveloping worm;

said first gear is a matting gear with said first enveloping worm;

said second gear is a matting gear with second enveloping worm.

7. (Canceled) Epicyclic gear train as recited in claim 6 wherein said enveloping worms have threads with less than one revolution.
8. (Canceled) Epicyclic gear train as recited in claim 6 wherein said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worms.

9. (Canceled) Epicyclic gear train as recited in claim 6 wherein said first and second gears have axis of rotation parallel to axis of rotation of said enveloping worms.

10. (Canceled) Epicyclic gear train, comprising:

a rotating carrier;

first and second coaxial satellite gears rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gear;

said carrier is coaxial to said first and second gears;

said first satellite gear is an enveloping worm;

said second satellite gear is a conventional gear;

said first gear is a matting gear with said first enveloping worm;

said second gear is a matting gear with said conventional gear.

11. (Canceled) Epicyclic gear train as recited in claim 10 wherein said enveloping worm has threads with less than one revolution.

12. (Canceled) Epicyclic gear train as recited in claim 10 wherein said first and second gears have axis of rotation perpendicular to enveloping worm axis of rotation and said second satellite gear is spiral bevel gear and second matting gear is a spiral bevel gear.

13. (Canceled) Epicyclic gear train as recited in claim 10 wherein said first and second gears have axis of rotation parallel to enveloping worm axis of rotation and said second satellite gear is spur gear and second matting gear is a spur gear.

14. (Canceled) Epicyclic gear train as recited in claim 10 wherein said first and second gears have axis of rotation parallel to enveloping worm axis of rotation and said second satellite gear is a helical gear and second matting gear is a helical gear.

15. (Canceled) Epicyclic gear train as recited in claim 10 wherein said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worm and said second satellite gear is a spiral bevel gear and second matting gear is a spiral bevel gear.

16. (Canceled) Epicyclic gear train as recited in claim 10 wherein said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worm and said second satellite gear is a worm and second matting gear is a face gear.

17. (Canceled) Epicyclic gear train as recited in claim 16 wherein said first and second gears have axis of rotation perpendicular to axis of rotation of said enveloping worm.

18. (New) Epicyclic gear train, comprising:

a rotating carrier;

a satellite gear rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gear;

said carrier is coaxial to said first and second gears;

said satellite gear is an enveloping worm and first and second gears are mating gears with said enveloping worm;

said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worm.

19. (New) Epicyclic gear train as recited in claim 18 wherein said enveloping worm has threads with less than one revolution.

20. (New) Epicyclic gear train, comprising:

a rotating carrier;

a satellite gear rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gear;

said carrier is coaxial to said first and second gears;

said satellite gear is an enveloping worm and first and second gears are mating gears with said enveloping worm;

said first and second gears have axis of rotation parallel to axis of rotation of said enveloping worm.

21. (New) Epicyclic gear train as recited in claim 20 wherein said enveloping worm has threads with less than one revolution.

22. (New) Epicyclic gear train, comprising:

a rotating carrier;

first and second coaxial satellite gears rotatably supported by said carrier;

first and second coaxial gears in mesh with said satellite gears;

said carrier is coaxial to said first and second gears;

said first satellite gear is an enveloping worm;

said second satellite gear is an enveloping worm;

said first gear is a mating gear with said first enveloping worm;

said second gear is a mating gear with second enveloping worm.

23. (New) Epicyclic gear train as recited in claim 22 wherein said enveloping worm has threads with less than one revolution.

24. (New) Epicyclic gear train as recited in claim 22 wherein said first and second gears have axis of rotation intersecting axis of rotation of said enveloping worms.

25. (New) Epicyclic gear train as recited in claim 22 wherein said first and second gears have axis of rotation parallel to axis of rotation of said enveloping worms.